

1 **ABSTRACT**

2 A pseudo-differential signaling system uses a plurality of signal lines and a
3 single, common reference voltage. Signal line voltages are interpreted only in
4 comparison to the reference line voltage. Within a receiving circuit, the reference
5 line is buffered prior to its distribution to multiple comparators. The system
6 utilizes an active buffer having a bandwidth that is significantly greater than the
7 resonant input frequency of the receiving circuit. In an alternative embodiment,
8 the signal lines are also buffered. In this embodiment, the buffers are
9 implemented with transistor-based source-followers. The buffer associated with
10 the reference line has a larger current capacity than the buffers associated with the
11 signal lines. In yet another embodiment, a comparator produces a correction
12 signal that is equal to the noise present on the signal lines. This noise is then
13 subtracted from the signal voltages.